

Serial No.: 10/689,565
Docket No.: ST02010USU (246-US-U1)

REMARKS

Claims 1-24 are pending in this application and claim 1-24 are rejected. Applicant has amended claims 5, 13, and 21. The Applicant believes that the present patent application is in condition for allowance. Applicant is traversing the 35 U.S.C. §112, first paragraph rejections and the 35 U.S.C. §103(a) rejections. Applicant believes that no new matter has been added by this response.

Response to the 35 U.S.C. §112,

First Paragraph Rejections

The Examiner rejected claims 1-24 under 35 U.S.C. §112, First Paragraph, as the disclosure not being enabled. Specifically, the Examiner cited independent claims 1, 9 and 17, that recite "a processor that identifies a CW jamming signal by employing a predetermined fixed code for a PRN code" is not supported, (see Non-final Office Action, page 2). The Examiner stated that "the use of PRN codes by the processor is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure", (Id.).

Applicant would like to direct the Examiner's attention to, for example, paragraph 79 on page 13 of the specification. The specification at paragraph 79 on page 13, describes and teaches an example embodiment of the crosscorrelator being placed in a mode where the crosscorrelator employs all ones for a fixed PRN code. Further, figure 2 of the specification shows all ones being used in the correlator to track the jamming signal. Therefore, the use of a predetermined PRN code and an example embodiment

Serial No.: 10/689,565
Docket No.: ST02010USU (246-US-U1)

wherein a fixed PRN code is all ones is described and taught in the specification and in the figures.

Thus, Applicant's claim limitations in claims 1-24 are supported and enabled by the specification and drawings and the Applicant asks that this rejection be withdrawn.

Second Paragraph Rejections

The Examiner rejected claims 5, 13 and 21 under 35 U.S.C. §112, Second Paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter. Specifically, the Examiner found insufficient antecedent basis for "the code for all ones" in line 2 of claims 5, 13 and 21.

Applicant has amended claims 5, 13 and 21 in order to correct the antecedent issue raised by the Examiner. Applicant believes that claims 5, 13 and 21 as presented have overcome the 35 U.S.C. §112, Second Paragraph rejection. Therefore, claims 5, 13 and 21 are now in condition for allowance.

Response to the 35 U.S.C. §103(a) Rejections

The Examiner rejected claims 1, 6, 9, 14, 17, and 22 under 35 U.S.C. §103(a) as being unpatentable over Norman et al. (U.S. 6,282,231) in view of Turetzky et al. (US 2002/0025828). Claims 2-4, 10-12 and 18-20 were rejected as being unpatentable over Norman et al. in view of Heinzl et al. (US 2002/0012411). Claims 7, 8, 15, 16, 23 and 24 were rejected as being unpatentable over Norman et al. in view of Van Stralen et al. (U.S. 6,621,855). Claims 5, 13 and 21 were rejected as being unpatentable over Norman et al. and Turetzky et al. and further in view of Keller et al. (US 2003/0108085). For reasons

Serial No.: 10/689,565
Docket No.: ST02010USU (246-US-U1)

set forth more fully below, independent claims 1, 9 and 17 patentably define over the cited prior art, and so the rejections are traversed as to all pending claims for at least that reason.

With respect to independent claims 1, 9 and 17, the Examiner states that Norman et al. does not specifically teach of the signal processor that identifies a carrier wave jamming signal with the crosscorrelator that is in a mode to identify carrier wave jamming signals and employs a fixed predetermined code for a pseudo random number (PRN) code (*see Non-final Office Action, page 5*). But, the Examiner then somewhat contradictorily states that “Norman et al. disclose[s] a method of removing a carrier wave jamming signal from a spread spectrum signal having a first signal tracking channel and a second signal tracking channel (column 7, lines 20-33).”

Nowhere in the Norman et al. reference does the term carrier wave jamming signal appear. Further, the Norman et al. reference discusses only autocorrelation and crosscorrelation of encoded signals. The signals are encoded with PRN codes. Those skilled in the art understand that a carrier wave jamming signal is not a signal that has been encoded with a PRN code prior to transmission, such as the signals in the Norman et al. reference that have the PRN encoded signals being autocorrelated and crosscorrelated.

The Examiner then went on to state that “Turetzky teaches of a method that relates...to systems, methods, and apparatuses for reducing or eliminating auto-correlation or cross-correlation in weak CDMA signals in the presence of strong CDMA signals,” (*Id.*). The Examiner then makes the assertion that “Turetzky teaches of a signal processor that identifies a carrier wave jamming signal with the cross correlator that is in a mode to identify carrier wave jamming signals and employs a fixed predetermined code

Serial No.: 10/689,565
Docket No.: ST02010USU (246-US-U1)

(local code, Paragraphs 0032 – 0040, 0042) for a pseudo random number (PRN) code (Paragraphs 0032-0040)," (*Id.*).

In paragraphs 0032-0040, 0042, no mention of the crosscorrelator being in a mode to detect carrier wave jamming signal can be found. The Turetzky reference describes autocorrelation and crosscorrelation detection, no carrier wave jamming signal detection and removal is disclosed.

For example in independent claim 1, "a signal processor that identify a carrier wave jamming signal with the crosscorrelator that is in a mode to identify carrier wave jamming signals and employs a fixed predetermined code for a pseudo random number (PRN) code" is claimed the Applicant. Similar subject matter appears in independent claims 9 and 17. The cross correlator has to be in a mode to identify carrier wave jamming signals and that is not found in the references. Further, the term "carrier wave jamming" does not even appear in the Turetzky reference or the Norman et al. reference.

If the references fail to teach all of the claim elements when combined, there can be no success in achieving Applicant's invention. Further, there is no motivation to combine the references if the combined teachings are still lacking claim elements. Still further, the deficiencies of Norman et al. and Turetzky et al. as set forth above with respect to independent claims 1, 9 and 17 are not cured by the cumulative citation of any of the prior art cited in rejections against the dependent claims.

Therefore, independent claims 1, 9 and 17 are in condition for allowance along with the claims that depend from the allowable claims, for at least the reasons presented above.

Serial No.: 10/689,565
Docket No.: ST02010USU (246-US-U1)

Conclusion

In view of the foregoing discussion, Applicant respectfully submits that the claims 1-20 as presented are in a condition for allowance, for which action is earnestly solicited.

Respectfully submitted,

By Gregory B. Gulliver
Attorney for Applicant

Gregory B. Gulliver, Reg. 44,138
Phone: (847) 282-3551
Fax: (847) 574-8035

The Eclipse Group LLP
10605 Balboa Blvd., Suite 300
Granada Hills, CA 91344